



ARTICLES

Cataloging of Original Materials in the 21st Century: Frequency and Preparation Factors

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Abstract

Cataloging and catalogers play an important role in the access to electronic catalogs for users at all levels. Two recent studies investigating the preparation of entry level library media specialists and the frequency they perform original cataloging led to a larger examination of the topic in the context of academic libraries. One factor has been the steady decline in required cataloging courses in ALA-accredited library schools for the past two decades. A second factor is the relative supply of catalogers and how they have been reallocated within the academic library. A third factor is the increasing practice of cataloging outsourcing. Implications of high levels of cataloging by librarians lacking preparation are analyzed. The potential for flawed electronic records being shared and viewed over the Internet has implications for all levels.

As the last century ended, the issue of cataloging materials in libraries seemed to be generally settled. Rather than do original cataloging, smaller libraries would purchase electronic records or share cataloging done by expert catalogers in larger libraries to populate their electronic catalogs. If any original cataloging or editing of an electronic record at the local level were to be done, it would be at the copy cataloging level. If a set of data needed to be cleaned up, vendors or data utilities would provide the services to prepare a clean database in electronic format. The approach appeared to be a good match for the abilities and needs of libraries to share electronic data across systems and states.

With those procedures in place, fewer schools of library science made cataloging a required course, with the understanding that the basic theory would be included in foundational information retrieval courses. Spillane (1999) reported a decline in required cataloging courses in ALA accredited library schools from being required in 70.2% of the schools in 1986 to 55.4% in 1999. Saye (2002) verified the trend and the continued drop in his study to 41%. In a review of course offerings in 2006, Fuller identified the percentage of ALA schools requiring a basic cataloging course at 20%. Long-suffering students chose to take other electives rather than cataloging in their preparation program. Union catalogs reduced or laid off cataloging staff responsible for data clean up. As long as librarians could use a standard number to find the appropriate expertly catalogued record, the electronic world would change the approach to preparing new librarians.

Figure 1
Decline in Required Cataloging Courses 1973-2006

Year	N	Useable N	Number of Programs Requiring Course(s)	Percent of Programs	Data Source
1973	58	47	33	70.2%	Thomas (1976)
1986	63	55	43	70.2%	<i>Cataloging News</i> (1987)
1998	NA	56	31	55.4%	Spillane (1999)
2002	56	56	23	41.1%	Saye (2002)
2006	56	50	10	20 %	Fuller (2006)

On the other side of the millennium, practice may not be following the form assumed a few years earlier. Research indicated Kaplan's (2006) assertion that the conventional wisdom about practitioners not needing to catalog was wrong. Fuller (2006) reported high levels of cataloging activities among library media specialists. In an assessment of LIS program completers and their preparation for practice, Shannon (2006) identified cataloging as one area where students and their supervisors felt that new library media specialists were least well prepared upon completion of their programs. Anecdotally, union catalog staff reported increasing numbers of flawed incoming records that had to be cleaned up. The problem was reported for all levels of union catalogs, from district through statewide.

A number of studies have focused on cataloging practices in a variety of academic library settings. The authors identify a number of issues with an impact on quality including productivity benchmarks (Charbonneau, 2005), outsourcing (Lam, 2005), decline of the number of professional catalogers (those holding a MLIS) (Leysen & Boydston, 2005), and the lack of required cataloging courses in professional preparation programs (Hall-Ellis, 2006). The factors are interrelated. When records for resources are purchased (the cataloging is outsourced), professional positions in cataloging are reallocated within the organization, resulting in a decline in the number of professional catalogers. The expanded role for catalogers is easily identified in the study of Buttlar and Garcha (1999) where added job responsibilities such as reference desk work, collection development, and bibliographic instruction at least double from 1986 to 1997 (317). Medeiros (2006) links the quality of cataloging to survival of academic libraries suggesting the time has come to accept an error rate, because "there are too many competing demands to allow legacy cataloging practices to inhibit such progress" (157).

The pages that follow analyze these indicators and address the question of "why are people still cataloging." Specifically, the issues surrounding the requirements for cataloging in library programs are examined, considering what impact course requirements have had on the amount of cataloging done in the field.

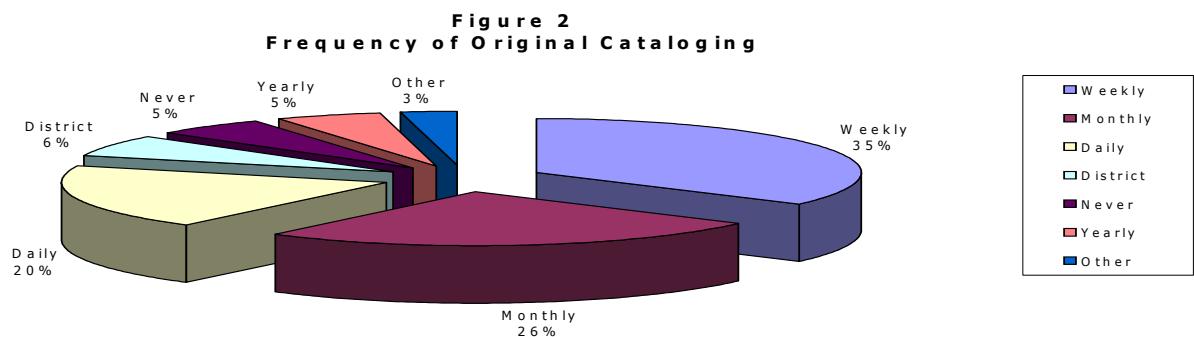
Cataloging Activity

Academic libraries face a challenge in the form of a subtle change from paper to electronic formats as their institutions make a conscious decision to purchase electronic access to current resources instead of their print collections (Hall-Ellis, 2006, 39). Leysen and Boydston (2005) reported in their study of academic libraries, "paraprofessional catalogers outnumber professional catalogers almost two to one" (257). Leysen and Boydston also stated the increase of cataloging by paraprofessionals was increased by the changing responsibilities of the professional to management and supervision of the cataloging unit.

Outsourcing as a factor in cataloging activity provides an interesting contrast. All of the examined studies about academic libraries revealed that the vast majority of sites were relying on vendors for a large percentage of the electronic data for their catalogs. Outsourcing grew from about 28% of academic libraries in 1997 (Libby & Caudle) to 70.2% in 2005 (Lam). Wolverton (2005) found academic libraries outsourced authority control 50% of the time. The respondents to the surveys indicated high levels of satisfaction, and indicated that the error rate was less than five percent for the large majority of the libraries (Lam, 2005, 112). When Charbonneau (2005) examined the problem of benchmarking

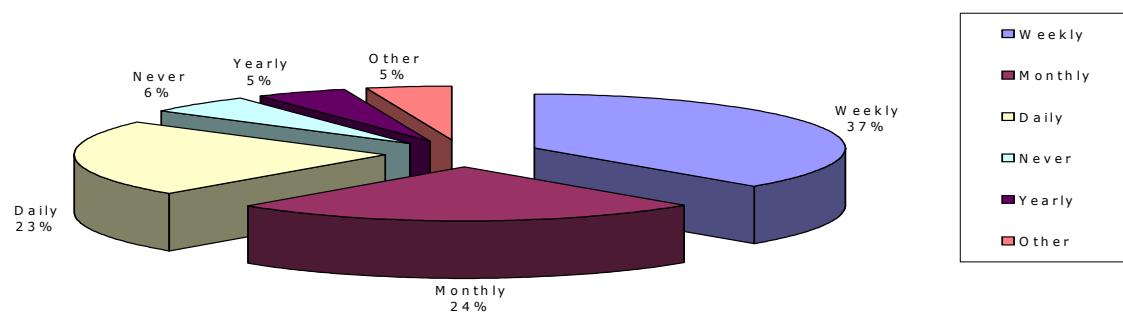
catalogers' work, the same kind of work where vendors are judged on their error rates, she found it almost impossible to make comparisons because "[cataloging] is an intellectual enterprise that often requires the application of the cataloger's judgment" (47). When discussing productivity measures, academic libraries may be using different standards for outsourced work and work done in-house.

As part of the San Jose State University *School Library Journal* survey of library automation (Fuller, 2006), questions were posed about the frequency with which they created original MARC records or edited them in their systems. Of the 961 responses by library media specialists, 25.6% indicated this occurred on at least a monthly basis (Figure 2).



An additional 34.9% reported that original cataloging was done on a weekly basis, and 19.6% reported daily original cataloging. Survey respondents were also asked about the frequency with which records in their databases were edited. Again, the most common frequency reported (37.6%) was weekly (Figure 2). The amount of respondents indicating daily and monthly editing was almost the same, 23.2% for daily edits to 24.5% monthly.

Figure 3
Frequency of Editing Cataloging



The data suggest that the respondents were aware of alternatives for cataloging such as Z39.50 clients or Internet sites with cataloging. The respondents are also aware of data enhancement and data clean up products and services. 35.9% indicated they never use these services versus the 19.8% who "did not know." For data enhancement and clean up, the comparative responses between "never" and "did not know" was 41.

Figure 4
Summary of Frequency of Use Responses

	Never	District Catalog	Daily	Weekly	Monthly	Yearly	Not Available	Do Not Know
Original MARC Cataloging	5.4%	6.4%	19.6%	34.9%	25.6%	5.4%	0.4%	2.3%
Edit MARC Records	5.6%	NA	23.2%	37.6%	24.5%	4.6%	1.7%	2.8%
3 rd Party Products	41.5%	NA	6.9%	12.8%	14.5%	10.5%	6.1%	7.7%
Z39.50 Find and import	35.9%	NA	6.7%	14.1%	14.9%	3.2%	5.4%	19.8%
Import / Export MARC	5.6%	NA	7.9%	30.0%	41.4%	11.8%	0.6%	2.6%

Academic Preparation for Cataloging

Fuller's and Shannon's studies, which examined the level of preparation of entry level cataloging professional, used similar approaches: beginning with the expectations of the employers and then matching them to the course work required of -- or offered to -- candidates in schools of library information science.

Funded by an Institute for Museum and Library Services (IMLS) grant to develop an outcomes-based model for recruiting and educating LMSs from rural and low socio-economic areas, Shannon (2006) examined the level of teacher-librarian preparation of candidates who had completed their program at the University of South Carolina between 1997 and 2003. The purpose of the survey was to identify gaps in the preparation program. Her research investigated the views of five groups: the program graduates,

supervisors of library media, district hiring personnel, internship supervisors, and principals. The methodology used to capture these views included surveys and focus groups. Her findings from open-ended question responses indicated that graduates and internship supervisors identified cataloging as one of two areas where more preparation was needed.

Hall-Ellis (2006) approached the problem of academic preparation by reviewing position announcements and coding the terms used over a five-year period. The institutional announcements included public libraries, special libraries, and higher education. The vast majority of job announcements were from higher education, 152 out of a sample of 266. All of the libraries required the successful candidate to be able to catalog all formats, but the higher education institutions were more likely to require the candidate to have completed basic cataloging in preparation for the MLIS. Universities, presumably research institutions, were more likely to require advanced cataloging classes than other post-secondary institutions. The employers understood the need for beginning catalogers to be able to catalog using metadata schema in order to provide access to a wide variety of electronic resources (47).

For a variety of reasons, slightly more than half of the respondents to the Leysen and Boydston (2005) study reported problems recruiting professional catalogers. While they did not have specific data to conclude that the pool of applicants was not as strong as it was in the past, anecdotal evidence indicated they "may have to compete for catalogers with non-library employers, such as vendors" (258). Leysen and Boydston also concluded that the increase of supervisory tasks required of the professional cataloger will mean that library schools will need to include management coursework in their preparation of professional catalogers (259).

Trajectories of Cataloging Problems

Midway through the first decade of the 21st century, powerful tools allow the users of information systems to access information at any time, anywhere, and from any other spot on the globe. The globalization of information has made library collections visible all over the world. The quality of the products produced by libraries is evident to anyone accessing them. Where is the quality issue most important? Certainly, the impact is felt at the local level. Further down stream any union catalogs formed from the records created will be impacted. With the emergence of new generations of library automation products, groups from higher education consortia to school districts are creating their own union databases. In short, three trends are likely to increase the impact of poor-quality cataloging: the extent of possible items to be catalogued, the increasing existence of union catalogs, and the federated approach to cataloging that can result in dire cross-pollination of inaccurate records.

One specific conclusion to be made is that union data collections rely heavily on the contributors to provide quality data. Subrahmanyam's (2006) research into the consistency of Library of Congress Classification numbers in 52 union catalog systems revealed they were consistent 85% of the time. While that might be reassuring, the chances for error when multiplied by millions of records are staggering. Depending upon the kinds and types of information organizations involved in the creation of a union database, any large group of user-contributed cataloging records of poor quality can consume precious resources of the union database to correct. GIGO, "garbage in, garbage out," the first rule of data processing is still valid. The least expensive place to insure the highest quality data is at the originating site.

The impact of the amount of cataloging and cataloging skill preparation on union catalogs needs hard data to help define the anecdotal record. The opportunity exists for some interesting analysis of union catalog databases. The data is in digital form and can be manipulated using automated tools. The records needing to be repaired are a valuable source of information, giving the researcher valuable information regarding the most common errors, source of errors and other data.

A second conclusion is to agree with Levitt and Dubner (2005) that "conventional wisdom is often wrong" (13). The notion that cataloging by large staffs in large libraries could be then shared nationally has proven to be false. The creation of new information resources far surpasses the capacity of those large libraries to provide comprehensive cataloging (Piepenburg 1994, vii). Furthermore, while current best management practice identifies the most efficient means of providing access to a collection to be

purchasing electronic data, consulting district level and statewide catalogs, and using Internet sources (Woolls, 2004, 177), the reality is that libraries still place a heavy reliance on original cataloging. Institutions may create their own documents, which require original cataloging. Many items are still difficult to locate in other catalogs, and some systems still do not want to pay for existing records or outsource cataloging in general.

In this light, the finding that the large majority of library media specialists are aware of alternatives to original cataloging is particularly intriguing. The alternatives are cost-effective when compared to the cost of a professional's salary or a trained library technician. Often the alternatives can be automated to eliminate drudgery. People are the most precious resource in a library. Why are the most costly resources of the library utilized for cataloging? Many of the survey respondents were "solo librarians" so the valuable human resource of the library was entering data into an automated system. What is the self-perception of manager versus the worker in these libraries? How do these solo librarians value their time?

As is with the case of any interesting research findings, there are more questions to be asked than answered. Both Shannon and Fuller examined populations limited to library media specialists; how do their findings apply to other academic libraries? If the problem is a function of the requirements for library preparation programs, other post-secondary institutions with a small library staff should report similar findings; i.e., that original cataloging is prevalent, and that librarians may feel inadequate to do the job.

Hall-Ellis (2006) used position announcements to examine the expectations of employers about beginning catalogers. The same methodology could be further refined to determine whether staff size, collection size, and format of the collection influence the expectations of employers for librarians to be able to catalog resources. Considering the volume of cataloging reported, further investigation is needed about the "what," not just the "how much." What is being catalogued on a daily, weekly, and monthly basis? What are the local constraints that need to be observed by the cataloger? What is the source of the materials needing to be catalogued: donations, purchased, or licensed? Are they unique and library specific or are they resources that are not unique and found in common cataloging databases? What alternatives are available to provide shared electronic data?

Summary – Why Are People Still Cataloging?

The notion of cataloging trickling down from major libraries or library systems, freeing the majority of librarians from the onerous task of cataloging was flawed even in the decade of the eighties when it became the conventional wisdom. Even then, the rate of growth of the materials to be catalogued far outpaced the ability of large cataloging units to keep current. The Internet has proven to be both a vehicle for providing the cataloging as well as a source of cataloging problems. A video imbedded within a larger set of web pages is a challenge to librarians as they provide access to a new generation of information consumers who assume that libraries can bring that video to them regardless of geography and time. If libraries cannot deliver the "goods," this generation of users will find some other source that will.

Academic libraries recognize the cataloging quality problem and a corresponding shortage of professional catalogers. At the same time the strong service traditions of academic libraries may not deliver the result desired by the new generation of information consumers. These information consumers are motivated by a desire to get a "good enough" answer, not the perfectly catalogued one. Nevertheless, accurate and sophisticated cataloging is necessary in order to provide immediate access to the specific information desired, particularly in non-traditional formats.

Additionally, at the same time, the wide variety of options to find and download the shared electronic cataloging records are not being utilized. Practitioners are self-identifying the lack of preparation for cataloging in real world situations, and yet they indicate they are aware of online resources or other products to assist the process of creating electronic records – and still choose not to use those alternatives. The lack of a connection between the acknowledged shortcomings, options to overcome the shortcomings, and actual practice is intriguing and frightening.

Researchers have a rich arena in which to pursue additional inquiry. Most of the data exist in electronic format and can be manipulated for analysis using electronic research tools. Additionally, the opportunity also exists for behavioral studies of the practitioners' disconnect between theory and their practice.

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